#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-023998 Address: 333 Burma Road **Date Inspected:** 21-May-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes An Qing Xiang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component: OBG** Components

### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

### **NDT**

Outside Yard – OBG Trial Assembly

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted notification number 09197.

Magnetic Particle Testing (MT).

This QA inspector performed MT of approximately 15 % of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

SEG3013H-024.

# WELDING

This QA Inspector observed the following work in progress:

Outside Yard – OBG Trial Assembly

# WELDING INSPECTION REPORT

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This QA Inspector observed ZPMC qualified welding personnel identified as 068596 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam to Sub Assembly weld at panel point 128.7 of OBG Segment 14W. Weld joint is identified as SEG3020B-116. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2212-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040655 perform welding by Shielded Metal Arc Welding (SMAW), on Deck panel to Edge plate weld between panel points 128 and 128.3 of OBG Segment 14W. Weld joint is identified as SEG3020-017. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2212-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 067765 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam I Rib stiffener to Anchor plate weld at panel point 127 of OBG Segment 14W. Weld joint is identified as SEG3020AQ-015. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 066751 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam I Rib stiffener weld at panel point 127 of OBG Segment 14W. Weld joint is identified as SEG3020M-007. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2114-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 050038 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam I Rib stiffener to Anchor plate weld at panel point 127 of OBG Segment 14W. Weld joint is identified as SEG3020AP-040. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified NDT personnel perform Ultrasonic Testing on Sub Assembly part SA3416A and SA3416 C to Floor beam weld at panel point 128.3 of OBG Segment 14W. Weld joint is identified as SEG3020AV-006, 011. A Total of 16 Class A indications were found on the weld joints SEG3020AV-006, 011. See attached picture.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

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# **Summary of Conversations:**

No significant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Upadhye,Anand	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer